

## REMARKS

The Office Action dated February 6, 2008 has been received and considered. Reconsideration of the outstanding rejections in the present application is respectfully requested based on the following remarks.

### Allowability of Claims

The Applicant notes with appreciation the indication at page 10 of the Office Action that claims 4-6, 11-13, and 17-20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicant has opted to forgo rewriting these claims as suggested in view of the following remarks.

### Obviousness Rejection of Claims 1-3, 7, 14 and 16

At page 3 of the Office Action, claims 1-3, 7, 14 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baird (U.S. Patent No. 6,204,787 B1) in view of Nonoyama et al. (U.S. Patent No. 6,529,015) and further in view of Rabbii (U.S. Patent No. 6,313,685 B1). This rejection is hereby respectfully traversed.

Claim 1 recites “a first set of switches coupled to the pair of capacitors, the first set of switches configured to transfer a first charge to the pair of capacitors during a first phase, the first charge proportional to a reference voltage” and “a second set of switches coupled between the pair of capacitors and the integrator input, the second set of switches configured to transfer the first charge and a second charge to the integrator input during a second phase, the second charge proportional to the DC offset component and based on a voltage applied in series with the pair of capacitors during the second phase.” Thus, claim 1 recites a second set of switches configured to, during a second phase, transfer both a **reference-voltage-based first charge** stored at a pair of capacitors and a second charge to an integrator input, where the second charge is **based on a voltage applied in series with the pair of capacitors that stores the first charge**.

According to the Office Action at page 4, Nonoyama discloses a second set of switches (switches “a” in FIG. 1 of Nonoyama) configured to transfer a first charge and a second charge

to an integrator during a second phase. However, as acknowledged by the Office Action, Nonoyama fails to disclose that the second charge is based on a voltage applied in series with the capacitors that store the first charge. Further, there is no disclosure or suggestion in Nonoyama that the first charge is based on a reference voltage.

Accordingly, at page 5 of the Office Action, the Office turns to Rabii as disclosing the recited feature of a second set of switches at FIGs 3 and 4 and col. 4, lines 42-50 and col. 5, lines 51-67. The cited portions of Rabii disclose an offset capacitor (labeled  $C_{OS}$ ) is used to latch an offset voltage while charges based on a differential input voltage and stored at capacitors  $C_1$ ,  $C_2$ ,  $C_3$ , and  $C_4$  are accumulated at integration capacitor  $C_4$ . However, there is no disclosure that any of the charges stored at any of the capacitors of Rabii are based on a reference voltage in any manner. Thus, Rabii fails to disclose or suggest a second set of switches configured to transfer a first reference-voltage-based charge and a second charge to an integrator input during a second phase, where the second charge proportional to a DC offset component and based on a voltage applied in series with the pair of capacitors during the second phase. Further, the other cited references fail to remedy the deficiencies of Rabii. Accordingly, the cited references fail to disclose or suggest at least one element of claim 1.

Claims 2, 3, and 7 depend from claim 1. Accordingly, the cited references fail to disclose or suggest each and every element of claims 2, 3 and 7, at least by virtue of their dependence on claim 1. In addition, the dependent claims recite additional novel elements.

With respect to claims 14 and 16, these claims depend from claim 9. However, as acknowledged by the Office Action at page 9, the cited combination of Baird, Nonoyama and Rabii fails to disclose or suggest at least one element of claim 9. Accordingly, Applicant respectfully submits that the cited combination of Baird, Nonoyama and Rabii necessarily fails to disclose or suggest at least one element of claims 14 and 16, at least by virtue of their dependence on claim 9. In addition, claims 14 and 16 recite additional novel elements.

In view of the foregoing, it is respectfully requested that the obviousness rejection of claims 1-3, 7, 14 and 16 be withdrawn and the claims reconsidered.

#### **Obviousness Rejection of Claims 8 and 15**

At page 6 of the Office Action, claims 8 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of Nonoyama et al. and further in view of Rabbii, and further in view of Ferguson, Jr. et al (U.S. Patent No. 6,040,793). This rejection is hereby respectfully traversed.

Claim 8 depends from claim 1. As explained above, Baird, Nonoyama, and Rabii fail to disclose or suggest at least one element of claim 1. In addition, Ferguson, Jr. does not remedy the deficiencies of the other cited references. Accordingly, the cited references fail to disclose or suggest each and every element of claim 8, at least by virtue of its dependence on claim 1. In addition, claim 8 recites additional novel elements.

With respect to claim 15, the claim depends from claim 9. However, as acknowledged by the Office Action at page 9, Baird, Nonoyama, and Rabii fail to disclose or suggest at least one element of claim 9. Further, there is no assertion in the Office Action that Ferguson Jr. remedies the deficiencies of the other cited references with respect to claim 9, nor does Ferguson, Jr. in fact remedy those deficiencies. Accordingly, Applicant respectfully submits that the cited references also fail to disclose or suggest at least one element of claim 15, at least by virtue of its dependence on claim 9. In addition, claim 15 recites additional novel elements.

#### **Obviousness Rejection of Claims 9 and 10**

At page 7 of the Office Action, claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of Nonoyama et al. and further in view of Rabbii, as applied to claim 1 above, and further in view of Bazarjani et al. (U.S. Patent No.6.005.506). This rejection is hereby respectfully traversed.

Claim 9 recites “a second set of switches coupled to the pair of capacitors, the second set of switches configured to transfer the first charge and a second charge to the integrator input during a second phase, the second charge proportional to the DC offset component and based on a voltage applied in series with the pair of capacitors during the second phase.” For reasons similar to those described above with respect to claim 1, Nonoyama and Rabbii fail to disclose or suggest at least the cited features of claim 9. Further, Bazarjani fails to remedy the deficiency of

Nonoyama and Rabbii. Thus, the cited references, individually and in combination, fail to disclose or suggest at least one element of claim 9.

Claim 10 depends from claim 9. Accordingly, the cited references fail to disclose or suggest each and every element of claim 10, at least by virtue of its dependence on claim 9. In addition, claim 10 recites additional novel elements.

In view of the foregoing, it is respectfully requested that the obviousness rejection of claims 9 and 10 be withdrawn and the claims reconsidered.

### **Conclusion**

The Applicant respectfully submits that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

The Applicants believe no additional fees are due, but if the Commissioner believes additional fees are due, the Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Respectfully submitted,

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Date